Calendar No. 880

100TH CONGRESS *2d Session*	SENATE	REPORT 100-464

TELECOMMUNICATIONS SERVICES FOR THE HEARING-IMPAIRED

Mr. HOLLINGS, from the Committee on Commerce, Science, and Transportation, submitted the following

REPORT

OF THE

SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

ON

S. 2221

AUGUST 9, 1988.—Ordered to be printed

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TELECOMMUNICATIONS SERVICES FOR THE HEARING-IMPAIRED

AUGUST 9, 1988.—Ordered to be printed

Mr. HOLLINGS, from the Committee on Commerce, Science, and Transportation, submitted the following

REPORT

[To accompany S. 2221]

The Committee on Commerce, Science, and Transportation, to which was referred the bill (S. 2221) to expand our national telecommunications system for the benefit of the hearing-impaired, and for other purposes, having considered the same, reports favorably thereon with an amendment in the nature of a substitute and recommends that the bill do pass.

PURPOSE OF THE BILL

The bill, as reported, will expand the Federal telecommunications system's ability to serve the needs of the hearing- and speech-impaired by (1) improving the Federal relay system and (2) requiring installation of Telecommunications Devices for the Deaf (TDDs) in Federal agencies and Congress. This relay system will serve as an interim system until the Federal Communications Commission (FCC) designs a permanent proposal.

BACKGROUND AND NEEDS

There are over 24 million hearing-impaired and 2,800,000 speech-impaired individuals in the United States. TDDs are used by these individuals to communicate over the telephone network. TDDs use a typewriter style device equipped with a message display (screen). The device sends a coded signal through the telephone network via a voice circuit. Relay services are needed to enable TDD users to have telephone conversations with voice users. The caller speaks to, or types a request to, a translator (relay operator). The transla-

tor uses a video display system to translate the typed or voice message from one medium to the other. Two TDD users can communicate with each other without the need for a relay operator. Relay systems are only needed when one party has a TDD system and the other does not, or the two TDD users use different systems.

In an effort to address the needs of the hearing-impaired and speech-impaired populations, in August 1986, the Architectural and Transportation Barriers Compliance Board (Board) began operating a Federal governmentwide TDD relay service on a trial basis (the Federal TDD Relay Exchange). This service, due to end in August 1988, is used by Federal employees who are TDD users and others who communicate with those employees. This service also enables TDD users outside the Federal Government to call non-hearing-impaired employees. The Board's trial relay system will be expanded under this legislation. The goal is to provide sufficient service for the Federal agencies until a permanent system is implemented.

The current relay system consists of one relay operator (but no back-up operator), two TDDs, one hardcopy printer, and two telephone answering machines. The total cost of operating this service for 1 year was $17,289. To date, "56 agencies have initiated and received calls and another 43 agencies received calls through the exchange service. The number of calls averages 537 per month. The average length of the calls is seven minutes."[1] approximately 45 Federal agencies, including the Senate, have installed TDD equipment and many of these agencies have multiple TDDs.[2] for example, the Justice Department has TDDs in eight of its offices. Congressmen and Senators are permitted to purchase TDDs as part of their office equipment. It is the Committee's understanding that as of June 1988, approximately 16 Senators had TTDs in their offices.

The Board, in its "Federal TDD Relay Exchange Evaluation and Report", noted that the installation of TDDs increased the number of TDD-relayed calls to agencies and has improved the performance of deaf and speech-impaired employees by reducing telecommunications barriers. The number of calls to and from agencies using the relay exchange clearly demonstrates that there is a need for the service. In addition, as more agencies install TDDs, the Committee expects the number of calls to increase. It has long been recognized that all employers should take whatever steps possible to fully integrate persons with physical impairments into the work force.[3] In the case of hearing-impaired and speech-impaired individuals, the costs of installing TDDs and operating the relay service are small in comparison to the resulting benefits.

In sum, the purpose of this legislation is to improve access to the Federal Government for hearing-impaired and speech-impaired individuals and reduce the barriers facing Federal employees who are hearing- and speech-impaired.

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[1] *See,* Testimony of Tom Harvey, hearing on S. 2221, Telecommunications Services for the Hearing-Impaired, June 23, 1988, Federal TDD Relay Exchange Evaluation and Report.

[2] *See,* Testimony of Tom Harvey, hearing on S. 2221, Telecommunications Services for the Hearing Impaired, 1988 Federal Directory.

[3] Section 504 of the Rehabilitation Act of 1973 prohibits the discrimination on the basis of handicap in programs or activities conducted by the Federal Government. S. 2221 is not intended to diminish the obligations of Federal agencies pursuant to section 504 of the Rehabilitation Act.

Legislative History

S. 2221 was introduced on March 29, 1988, by Senator McCain. The Communications Subcommittee of this Committee held a hearing on the bill on June 23, 1988. The hearing witnesses were representatives of the Board, the New York Public Service Commission, Gallaudet University, the National Association of the Deaf, the Alexander Graham Bell Society, and Telecommunications for the Deaf, Inc.

At its June 28, 1988, executive session, the Committee considered S. 2221 in open session. Senator McCain offered an amendment in the nature of a substitute to S. 2221. The Committee reported favorably on the amendment without objection.

Summary of Major Provisions

S. 2221 as reported by the Committee requires the following:

1. The FCC and the Board are directed to establish and implement a telecommunications system consisting of TDDs and a relay system for the hearing- and speech-impaired within the Federal Government.

2. The legislation requires the FCC to provide for increasing the capacity of the present Federal relay system within 90 days of enactment. This expanded system is only intended to serve as an interim system until the FCC completes the plan for a permanent system.

3. Within 18 months, the FCC is required to complete a rulemaking which will ensure that Federal agencies are equipped with adequate TDD service on a permanent basis.

4. The FCC, in consultation with the Board, is required to create a TDD directory listing Federal TDD access numbers.

5. The FCC is also required to complete its existing inquiry into the development of a non-Federal interstate relay system within 12 months.

6. All Congressional offices, including both the personal offices of Senators and Congressmen, and Committee offices, shall be equipped with TDDs.

Estimated Costs

In accordance with paragraph 11(a) of rule XXVI of the Standing Rules of the Senate and section 403 of the Congressional Budget Act of 1974, the Committee provides the following cost estimate, prepared by the Congressional Budget Office.

U.S. Congress,
Congressional Budget Office,
Washington, DC, August 3, 1988.

Hon. Ernest F. Hollings,
Chairman, Committee on Commerce, Science, and Transportation, U.S. Senate, Washington, DC.

Dear Mr. Chairman: The Congressional Budget Office has reviewed S. 2221, a bill to expand our national telecommunications system for the benefit of the hearing-impaired and speech-impaired populations, and for other purposes, as ordered reported by the

Senate Committee on Commerce, Science, and Transportation, June 28, 1988.

The bill would direct the Federal Communications Commission (FCC), in consultation with the Architectural and Transportation Barriers Compliance Board, to issue regulations requiring federal departments and agencies to be equipped with telecommunications devices for the deaf (TDDs). The FCC also would be required to publish the TTD access numbers. In addition, the bill would require congressional offices to be equipped with TDDs.

It is uncertain how many TDDs the federal government would have to purchase if S. 2221 were enacted because the bill only requires the FCC to "ensure that federal departments and agencies are equipped with TDDs". The bill does not define federal departments and agencies, so it is difficult to determine how many TDDs would be required.

If, for example, only the head office of each federal agency needed a TDD, then TDDs (at about $250 each) for approximately 500 offices would cost a total of $125,000 in 1990. If, on the other hand, federal departments and agencies were required to have a TDD in each location, then TDDs for about 7,000 buildings would cost a total of $1.8 million. The cost of this requirement ultimately would depend on the number and type of TDDs purchased. The cost of acquiring TDDs for congressional offices would depend on the same factors, and would range from $100,000 to $200,000.

Other costs of this bill are not expected to be significant. Enactment of S. 2221 would not affect the budgets of state or local governments.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is James Hearn.

Sincerely,

JAMES L. BLUM,
Acting Director.

REGULATORY IMPACT STATEMENT

In accordance with paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee provides the following evaluation of the regulatory impact of the legislation, as reported.

NUMBER OF PERSONS COVERED

The legislation requires that all Congressional offices, Federal departments and agencies be TDD-accessible. The bill will affect all hearing- and speech-impaired persons who work for the Congress or Federal agencies, and hearing- and speech-impaired persons who interact with the Congress or Federal agencies.

ECONOMIC IMPACT

According to the Congressional Budget Office, the cost of expanding the Federal relay system and equipping Congressional offices and Federal agencies with TDDs should range from approximately $125,000 to $2 million per year depending on the number of TDD's that are installed. While the cost of TDDs ranges from $150 to $500 per unit, that cost is expected to decrease as demand increases.

PRIVACY

Although this legislation provides for a relay system, thereby including a translator, personal privacy is ensured by the ethical code of translators. Thus, this legislation will not have any adverse impact on the personal privacy of the individuals affected.

PAPERWORK

This legislation will require a minimal amount of additional paperwork. The FCC will have to adopt reguations implementing the Federal relay system and specifying the number of TDDs Federal agencies and the Congress need to acquire to comply with this legislation.

SECTION-BY-SECTION

SECTION 1—PURPOSE

This section states that the purpose of this legislation is to implement an interim telecommunications system for hearing- and speech-impaired individuals, equip all Federal agencies with TDDs, and create and publish a directory of TDD-accessible numbers.

SECTION 2—FINDINGS

This section states that Congress finds that: (1) nationwide communications are important to overseeing the nation's affairs; (2) the FCC was established to facilitate the availability of nationwide wire communications; (3) 1 percent of the population suffers from some type of hearing or speech impairment; (4) the inability of the hearing- and speech-impaired to use the telecommunications systems is detrimental to interstate commerce; (5) the technology exists to provide such service; (6) the present Federal relay system is insufficient, and there are virtually no TDDs in Federal agencies; and (7) the establishment of a relay system and installation of TDDs in Federal offices is consistent with the mandate of the Communications Act.

SECTION 3—DEFINITIONS

This section defines: (1) "TDD" to mean a machine that employs graphic communications through the transmission of coded signals over telephone wires; and (2) "Federal departments and agencies" to mean each department, agency, or other entity of the U.S. Government, except Congress.

SECTION 4—REGULATION; PROGRAM

Subsection (a) requires the FCC and the Board to establish and implement a telecommunications system that (A) enables the hearing- and speech-impaired populations within the Federal government to communicate by telephone, and (B) serves as an interface between TDD users and Federal agencies.

Subsection (b)(1) requires the continuation and expansion of the existing Federal relay system to a minimum service level within 90 days of enactment of this legislation. The Board has been operating the experimental relay system. Thus, the Board, in consultation

with the FCC, should handle the interim expansion of the relay system. The Committee recognizes that the demands on the system may increase over time and expects the Board to respond appropriately.

Currently, the experimental Federal relay system consists of one operator, two TDDs, and two answering machines. The system has been handling an average of 37 calls per month. The current system does not provide for a second operator to fill in if the permanent operator takes any vacation or becomes ill. The service is available 5 days a week during normal business hours. The Committee expects that the relay system will be expanded to include at least a second operator and that arrangements will be made for replacements when operators take vacation or are ill. The FCC may determine that additional operators or equipment are necessary until a permament system is put into place. The goal of the legislation is to ensure that, until the permanent system is put into place, the relay system can accommodate calls between constituents to their representatives and Federal agencies. The Committee recognizes that the demands on the Federal relay system can be expected to increase as knowledge of its existence becomes more widespread.

Subsection (b)(2) requires the completion of an FCC rulemaking within 18 months that ensures: (A) Federal agencies are equipped with TDDs to provide the hearing- and speech-impaired direct access to those agencies; and (B) the accessibility of TDDs in Federal agencies is sufficient to meet the needs of hearing-impaired and speech-impaired employees.[4] To achieve this goal, the FCC needs to establish guidelines for Federal agencies to determine how many TDDs are needed by an agency to serve the needs of its employees and the public adequately. The Committee expects the FCC to devise these guidelines to ensure that the government can meet the needs of the hearing- and speech-impaired on a permanent basis. This determination should be based on an evaluation of the existing system, the anticipated needs of the Federal Government, and the available technology.

The FCC should also consider what can be done to reduce the costs of TDD services. TDD calls, both those which do and those which do not involve an operator, are necessarily lengthy, thus significantly increasing their cost. AT&T provides discounts for its relay service. The FCC needs to determine if other carriers should be required to provide relay services and if relay services should be provided at a reduced rate.

Subsection (b)(3) requires the FCC to create and maintain a TDD directory that lists Federal Government TDD access numbers. The purpose of this provision is to ensure that there is one central reference for all Federal TDD telephone numbers. Although the Board has a directory of Federal agency TDD access numbers, this directory does not include the numbers of individual Senators or Congressmen. The directory should be as comprehensive as possible to avoid the need for multiple calls to reach a specific individual or department.

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[4] Id.

Subsection (b)(4) requires the adoption of a standard logo signifying the presence of a TDD. The Committee understands that Gallaudet University has a TDD logo competition in progress. The Committee urges the FCC to consider the adoption of that logo as the Federal standard. The Committee wants to avoid the adoption of multiple TDD logos.

Subsection (b)(5) requires the FCC to support the development of technologies to reduce the costs of TDDs. In the rulemaking proceeding conducted pursuant to subsection (b)(2) the FCC should request information on new more efficient technologies that will result in cost reductions to TDD users purchasing equipment and in making calls.

Subsection (b)(6) requires the FCC to plan for the evolution of a telecommunications relay system with and within the Federal government. The purpose of this provision is to ensure that in designing the permanent system pursuant to subsection (b)(2), the FCC considers the long-term need of the Federal system and alternatives to TDDs that might be used in the future.

SECTION 5—INQUIRY REGARDING TDD INTERSTATE RELAY SYSTEM

This section requires the FCC to complete its ongoing inquiry concerning an interstate relay system for TDD users within 12 months after the date of enactment of this bill. In its Notice of Proposed Rulemaking and Further Notice of Inquiry (FCC 88–123, released March 29, 1988), the FCC has requested specific proposals for an interstate relay system, methods of reducing the costs to the ratepayers, and future technological developments. The Committee believes that it is imperative that the FCC complete this rulemaking promptly to move forward on the development of the permanent system referred to in section 4(b)(2).

SECTION 6—TDD INSTALLATION BY CONGRESS

This section requires Congress to equip its offices with TDDs sufficient to meet the needs of congressional employees and speech- and hearing-impaired individuals who desire to contact their representatives. The Senate Rules Committee has already approved the purchase of TDDs for Senate offices, but not Committee offices. The purchase of TDDs by Congressmen has also been approved. The Committee does not expect every employee of the Senate and Congress to have a TDD in his office. The Committee does expect that each Senator, Congressman, and Committee will have a TDD available to receive calls from constituents. In addition, TDDs should be available to accommodate the needs of hearing- and speech-impaired persons working for the Senate and House of Representatives.

SECTION 7—AUTHORIZATIONS

This section authorizes sufficient funds to carry out the provisions of this bill.

CHANGES IN EXISTING LAW

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, the Committee states that the bill as reported would make no change to existing law.

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